I. Amendments to the Claims

1. (Previously Presented): A system to compensate for luminance degradation of a display, the system comprising:

a controller coupled to the display and configured to provide power to the display thereby controlling the display luminance; and

a temperature sensor proximate the display and in electrical communication with the controller, wherein the controller is configured to vary the display luminance, based on a temperature measured by the temperature sensor, wherein the controller is configured to decrease the display luminance as the temperature of the display increases through a first temperature range until the temperature reaches an upper temperature threshold.

2. (Cancelled).

3. (Previously Presented): The system according to claim 1, wherein after the temperature reaches the upper temperature threshold the controller is configured to increase the display luminance as the temperature of the display decreases through the first temperature range to a lower temperature threshold.

4. (Original): The system according to claim 1, wherein the controller is configured to vary the display luminance based on a transfer function having a linear term.

5. (Original): The system according to claim 4, wherein the controller is configured to vary the display luminance based on the relationship $L_{OP} = m^*T_K + b$.

where L_{OP} is the display luminance, *m* is a gain, T_K is the temperature of the display, and *b* is an offset.

6. (Previously Presented): The system according to claim 1, wherein the controller is configured to define a second temperature range and vary the luminance of the display through the first temperature range based on the temperature of the display.

7. (Original): The system according to claim 6, wherein the controller is configured to control the luminance of the display to remain a constant value over the second temperature range.

8. (Original): The system according to claim 7, wherein a lowest temperature of the first range is between 20° and 30° C.

9. (Original): The system according to claim 6, wherein the luminance is at about 100% of full power luminance at the lowest temperature of the first range.

10. (Original): The system according to claim 9, wherein the luminance is at about 50% of the full power luminance at between 80° and 90° C.

11. (Original): The system according to claim 6, wherein the display luminance in the first temperature range is varied by a transfer function having a linear component.

12. (Original): The system according to claim 11, wherein the display luminance is varied based on the relationship $L_{OP} = m^*T_K + b$. where L_{OP} is the display luminance, m is a gain, T_K is the temperature of the display, and b is an offset.

13. (Original): The system according to claim 1, wherein the display luminance is varied based on a luminance degradation function.

14. (Original): The system according to claim 13, wherein the display luminance is varied based on a transfer function having an inversely proportional relationship to the luminance degradation function.

15. (Previously Presented): A method for compensating luminance degradation of an OLED display, the method comprising:

providing power to the OLED display;

measuring a temperature of the OLED display;

varying luminance of the OLED display based on the temperature of the OLED display; and

decreasing the display luminance as the temperature of the OLED display increases through a first temperature range until the temperature reaches an upper temperature threshold.

16. (Cancelled).

17. (Previously Presented): The method according to claim 15 increasing the display luminance as the temperature of the OLED display decreases through the first temperature range to a lower temperature threshold, after the temperature reaches the upper temperature threshold.

18. (Original): The method according to claim 15, wherein the display luminance is varied based on a transfer function having a linear term.

19. (Original): The method according to claim 16, wherein the display luminance is varied based on the relationship $L_{OP} = m^{*}T_K + b$. where L_{OP} is the display luminance, m is a gain, T_K is the temperature of the OLED display, and b is an offset

20. (Previously Presented): The method according to claim 15, further comprising defining a second temperature range and varying the luminance of the OLED display over the first temperature range based on the temperature of the OLED display.

21. (Original): The method according to claim 20, further comprising controlling the luminance of the OLED display to remain a constant value over the second temperature range.

22. (Original): The method according to claim 21, wherein the lowest temperature of the first range is between 20° and 30° C.

23. (Original): The method according to claim 20, wherein the luminance is at 100% of the full power luminance at the lowest temperature of the first range.

24. (Original): The method according to claim 21, wherein the luminance is at about 50% of the full power luminance at between 80° and 90° C.

25. (Original): The method according to claim 20, wherein the display luminance is varied by a transfer function having a linear component.

26. (Original): The method according to claim 25, wherein the display luminance is varied based on the relationship $L_{OP} = m^{*}T_K + b$. where L_{OP} is the display luminance, m is a gain, T_K is the temperature of the OLED display, and b is an offset.

27. (Original): The system according to claim 16, wherein the display luminance is varied based on a luminance degradation function.

28. (Previously Presented): A system to compensate for luminance degradation of an OLED display, the system comprising:

a controller coupled to the OLED display and configured to provide power to the OLED display thereby controlling the display luminance; and

a temperature sensor proximate the OLED display and in electrical communication with the controller, wherein the controller is configured to vary the display luminance, based on a temperature measured by the temperature sensor; wherein the controller is configured to decrease the display luminance as the

temperature of the OLED display increases through a first temperature range until the temperature reaches an upper temperature threshold.

29. (Cancelled).

30. (Previously Presented): The system according to claim 28, wherein after the temperature reaches the upper temperature threshold the controller is configured to increase the display luminance as the temperature of the OLED display decreases through the first temperature range to a lower temperature threshold.

31. (Original): The system according to claim 28, wherein the controller is configured to vary the display luminance based on a transfer function having a linear term.

32. (Original): The system according to claim 31, wherein the controller is configured to vary the display luminance based on the relationship $L_{OP} = m^*T_K + b$. where L_{OP} is the display luminance, m is a gain, T_K is the temperature of the OLED display, and b is an offset

33. (Previously Presented): The system according to claim 28, wherein the controller is configured to define a second temperature range and vary the luminance of the OLED display over the first temperature range based on the temperature of the OLED display.

34. (Original): The system according to claim 33, wherein the controller is configured to control the luminance of the OLED display to remain a constant value over the second temperature range.

35. (Original): The system according to claim 34, wherein a lowest temperature of the first range is between 20° and 30° C.

36. (Original): The system according to claim 33, wherein the luminance is at about 100% of full power luminance at the lowest temperature of the first range.

37. (Original): The system according to claim 36, wherein the luminance is at about 50% of the full power luminance at between 80° and 90° C.

38. (Original): The system according to claim 33, wherein the display luminance in the first temperature range is varied by a transfer function having a linear component.

39. (Original): The system according to claim 38, wherein the display luminance is varied based on the relationship $L_{OP} = m{*}T_K + b$. where L_{OP} is the display luminance, m is a gain, T_K is the temperature of the OLED display, and b is an offset.

40. (Original): The system according to claim 28, wherein the display luminance is varied based on a luminance degradation function.

41. (Original): The system according to claim 40, wherein the display luminance is varied based on a transfer function having an inversely proportional relationship to the luminance degradation function.

42. (New): A system to compensate for luminance degradation of a display, the system comprising:

a controller coupled to the display and configured to provide power to the display thereby controlling the display luminance; and

a temperature sensor proximate the display and in electrical communication with the controller, wherein the controller is configured to vary the display luminance, based on a temperature measured by the temperature sensor, wherein the controller defines a first temperature range having a upper temperature threshold and a lower temperature threshold, the controller is configured to decrease the display luminance as the temperature of the display increases from the lower temperature threshold through a the first temperature range until the temperature reaches an the upper temperature threshold, as such the display luminance transitions from an upper luminance value at the lower temperature threshold to a lower luminance value at the upper temperature threshold based on function of the temperature measured by the temperature sensor.

43. (New): The system according to claim 42, wherein the controller maintains the display luminance at the low luminance value when the temperature exceeds the upper temperature threshold.